



**Eagle Environmental Consulting, LLC**

**Alfred Garraffa**

**8000 W 44th Ave**

**Wheat Ridge CO 80033**

**December 11, 2024**

**Project Name - Noble - Sandau #34-12F**

**Project Number - [none]**

Attached are your analytical results for Noble - Sandau #34-12F received by Origins Laboratory November 07, 2024. This project is associated with Origins project number E4K0238-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory

303.433.1322

projectmanager@originslab.com



**1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645**





Eagle Environmental Consulting, LLC  
8000 W 44th Ave  
Wheat Ridge CO 80033

Alfred Garraffa  
Project Number: [none]  
Project: Noble - Sandau #34-12F

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-01	E4K0238-01	Water	November 7, 2024 11:45	11/07/2024 17:12
MW-02	E4K0238-02	Water	November 7, 2024 12:00	11/07/2024 17:12
MW-03	E4K0238-03	Water	November 7, 2024 12:15	11/07/2024 17:12
MW-04	E4K0238-04	Water	November 7, 2024 12:30	11/07/2024 17:12
MW-05	E4K0238-05	Water	November 7, 2024 12:45	11/07/2024 17:12

Origins Laboratory

Jen Pellegrini, Project Manager

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# ORIGINS

## LABORATORY

Eagle Environmental Consulting, LLC  
8000 W 44th Ave  
Wheat Ridge CO 80033

Alfred Garraffa  
Project Number: [none]  
Project: Noble - Sandau #34-12F

# ORIGINS

LABORATORY INC

ORIGINS WORK ORDER #

# 44K0238

Page 1 of 1

Client: Eagle Environmental Consulting

Project Manager: Alfred Garraffa

Address: 8000 W 44th Ave

Project Name: Sandau #34-12F

Telephone Number: 303-453-0474

Project Number: 44K0238

Collected By: JH

W=Water

Email Address: garraffa@eagle-env.com

Invoice/Billing Info: JH/Bill & Dan

Matrix Preservation: 100% Meq/L

SW=Surface Water

S=Soil | SO=Solid | O=Oil | A=Air | G=Gas | U=Ungrouped | HCl=Hydrochloric | HNO3=Nitric | H2SO4=Sulfuric | NaOH=Sodium Hydroxide

L=Liquid

#	Sample ID	Date Sampled	Time Sampled	# of Containers	Matrix Preservation	Analysis	Comments
1	MW-01	11/7/24	1145	1	600	100% Meq/L	
2	MW-02		1200			100% Meq/L	
3	MW-03		1205			100% Meq/L	
4	MW-04		1230			100% Meq/L	
5	MW-05		1245			100% Meq/L	
6							
7							
8							
9							
10							

1725 Elk Place Denver, Co. 80211 | #303.433.1322 | originslab.com | Temp Received- S-Y Received On Ice? ☒ Yes ☐ No

For Lab Sample Receiving Only:

Standard ☒ 48 Hr ☐ 72 Hr

Turnaround Time ☐ SAME DAY ☐ 24 Hr

Origins Laboratory

Jefe Pellegrini

Jen Pellegrini, Project Manager

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LABORATORY

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Alfred Garraffa  
Project Number: [none]  
Project: Noble - Sandau #34-12F

Origins Laboratory

## Sample Receipt Checklist

F-012207-01-R1  
Effective Date: 01/09/12

Origins Work Order: E4K0238

Client: Eagle

Shipped Project ID: Sandau

Checklist Completed by: SH61W

Shipped Via: HO

Date/time completed: 11/17/12

Airbill #: N/A

Matrix(s) Received: (Check all that apply): Soil/Solid ☒ Water ☐ Other: ☐

Cooler Number/Temperature: 1 15.4 °C 1 °C 1 °C (Describe) °C

Thermometer ID: 7007

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples preserved that require preservation and was it checked <sup>(1)</sup> ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity/pH < 2 for samples preserved with HNO <sub>3</sub> , HCL, H <sub>2</sub> SO <sub>4</sub> ) / (pH > 10 for samples preserved with NaAsO <sub>2</sub> +NaOH, ZnAc+NaOH)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Additional Comments (if any):				

<sup>(1)</sup>If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to be taken in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) AG

11/11/12  
Date/Time Reviewed

Origins Laboratory

*Jefe Pellegrini*

Jen Pellegrini, Project Manager

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Eagle Environmental Consulting, LLC  
8000 W 44th Ave  
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Alfred Garraffa  
Project Number: [none]  
Project: Noble - Sandau #34-12F

MW-01

11/7/2024 11:45:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory  
E4K0238-01 (Water)

Anions by IC 300.0

Chloride	266	31.2	mg/L	125	B4K1103	11/11/2024	11/12/2024
Sulfate	570	31.2	"	"	"	"	"

Total Dissolved Solids by 2540C

Total Dissolved Solids	1810	5.00	"	1	B4K1430	11/14/2024	11/14/2024
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Origins Laboratory

Jen Pellegrini, Project Manager

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Project: Noble - Sandau #34-12F

MW-02

11/7/2024 12:00:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory  
E4K0238-02 (Water)

Anions by IC 300.0

Chloride	327	31.2	mg/L	125	B4K1103	11/11/2024	11/12/2024
Sulfate	608	31.2	"	"	"	"	"

Total Dissolved Solids by 2540C

Total Dissolved Solids	2080	5.00	"	1	B4K1430	11/14/2024	11/14/2024
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Origins Laboratory

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**MW-03**

**11/7/2024 12:15:00PM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory**  
**E4K0238-03 (Water)**

**Anions by IC 300.0**

Chloride	269	31.2	mg/L	125	B4K1103	11/11/2024	11/12/2024
Sulfate	574	31.2	"	"	"	"	"

**Total Dissolved Solids by 2540C**

Total Dissolved Solids	1850	5.00	"	1	B4K1430	11/14/2024	11/14/2024
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Alfred Garraffa  
Project Number: [none]  
Project: Noble - Sandau #34-12F

MW-04

11/7/2024 12:30:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory  
E4K0238-04 (Water)

Anions by IC 300.0

Chloride	269	31.2	mg/L	125	B4K1103	11/11/2024	11/12/2024
Sulfate	573	31.2	"	"	"	"	"

Total Dissolved Solids by 2540C

Total Dissolved Solids	1850	5.00	"	1	B4K1430	11/14/2024	11/14/2024
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Origins Laboratory

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Alfred Garraffa  
Project Number: [none]  
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MW-05

11/7/2024 12:45:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory  
E4K0238-05 (Water)

Anions by IC 300.0

Chloride	290	31.2	mg/L	125	B4K1103	11/11/2024	11/12/2024
Sulfate	565	31.2	"	"	"	"	"

Total Dissolved Solids by 2540C

Total Dissolved Solids	1910	5.00	"	1	B4K1430	11/14/2024	11/14/2024
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**Classical Chemistry Parameters - Quality Control**  
**Origins Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B4K1103 - Filter .45um non acidified</b>										
<b>Blank (B4K1103-BLK1)</b>					Prepared: 11/11/2024 Analyzed: 11/12/2024					
Chloride	ND	0.250	mg/L							U
Sulfate	ND	0.250	"							U
<b>LCS (B4K1103-BS1)</b>					Prepared: 11/11/2024 Analyzed: 11/11/2024					
Chloride	3.90	0.250	mg/L	4.00		97.6	90-110			
Sulfate	4.10	0.250	"	4.00		103	90-110			
<b>Matrix Spike (B4K1103-MS1)</b>					<b>Source: E4K0226-07</b>		Prepared: 11/11/2024 Analyzed: 11/11/2024			
Chloride	583		mg/L	500	78.8	101	90-110			
Sulfate	496		"	500	0.00	99.2	90-110			
<b>Matrix Spike Dup (B4K1103-MSD1)</b>					<b>Source: E4K0226-07</b>		Prepared: 11/11/2024 Analyzed: 11/11/2024			
Chloride	583		mg/L	500	78.8	101	90-110	0.0322	5	
Sulfate	494		"	500	0.00	98.7	90-110	0.500	5	
<b>Batch B4K1430 - NO PREP</b>										
<b>Blank (B4K1430-BLK1)</b>					Prepared: 11/14/2024 Analyzed: 11/14/2024					
Total Dissolved Solids	ND	5.00	mg/L							U
<b>LCS (B4K1430-BS1)</b>					Prepared: 11/14/2024 Analyzed: 11/14/2024					
Total Dissolved Solids	996	5.00	mg/L	1010		98.6	90-110			
<b>Duplicate (B4K1430-DUP1)</b>					<b>Source: E4K0238-01</b>		Prepared: 11/14/2024 Analyzed: 11/14/2024			
Total Dissolved Solids	1870	5.00	mg/L		1810			3.27	10	

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### Notes and Definitions

U Sample is Non-Detect.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported on a wet weight basis.

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